Y2K Special Issue!

Captain's Call Kit

Summer 1999

CCK articles may be easily copied for posting on command bulletin boards. Articles may also be used for Plans of the Day, Captain's Call, SITE-TV, the command newspaper or reading and reference purposes. This quarter's articles include the following:

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What exactly is the Year 2000 problem?

Essentially, the Year 2000 problem (Y2K) refers to the potential failure of devices that rely on embedded chips for date/time information. Back in the early days of the computer boom, memory was expensive and processing speeds were painfully slow. To save memory space and increase processing time, programmers opted to represent years by only their last two-digits. Thus 1975 became simply 75.

This practice persisted, long after the need for saving space was eliminated. The two-digit code also was used in embedded chips, which exist in many devices that control processes, functions, machines, building ventilation systems, elevators and fire and security alarm systems, which are part of our everyday lives.

Embedded chips and software applications that are not made Y2K compliant will not comprehend the calendar rollover from 1999 to 2000, and as a result, machines that rely on them may fail.

Compounding this problem is the fact that the year 2000 is a leap year, and some systems may be unable to compensate for the extra day.

No one knows exactly what problems may occur, how widespread they may be or how long they will last. The good news is that federal, state and local governments; banks and other financial institutions; retail businesses; and every other group affected by this problem have been working to resolve it, and a great deal of progress has been made.

Other important Y2K–related dates

The basic Y2K problem arises from a computer's incorrect processing of a date, however, Jan. 1, 2000 is not the only date which may cause problems. For instance, consider the date Sept. 9, 1999, (9-9-99). In some older computer languages the code 9999 was used to denote the end of a process or to signal the program to delete certain data. Thus a "Y2K" failure could potentially happen in September.

When Navy managers address the Y2K problem all these dates are being considered and many fixes are already in place.

Here are some Y2K-related dates you need to know about:

1999-09-09: This date (9/9/99) was popular back in the 1980s as an expiration date for archived data that you wanted to have "no expiration date."
1999-10-01: government's FY00 begins
2000-01-01: overflows 2-digit years
2000-10-10: first 10-character date
2000-02-29: Leap Year
2001-01-01: first day of 21st century and start of a new millennium

Protecting your home computer from Y2K viruses

In addition to valid Y2K concerns over power spikes and blackouts, your computer is at risk to viruses, or "bombs" placed into Windows, and other operating systems, by hackers and criminals. Many of these viruses are keyed to activate at 0000 Jan. 1, 2000. The easiest way to avoid them is to turn off your computer prior to midnight, and reenergize it some time after that.

As the Year 2000 approaches, be especially vigilant about material you download. Always download through an up-to-date virus protection program, and, to the maximum extent possible, get all your downloads from a vendor you trust. As recent disclosures about gaming software show, even original material from vendors can contain viruses or undesirable material. Be very cautious: if possible, delay downloading until Jan. 15, 2000, to allow for a significant virus detection effort by major vendors on their websites.

If you opt to test your home system for Y2K compliance by setting the date forward, do not allow the system to roll forward from 2359 Dec. 31, 1999, to 0001 Jan. 1, 2000. If you do, you may activate the very viruses you are trying to detect. Choose a later date to instantaneously transition to, something like Jan. 6, 2000, for example.

Surfin' the Net for Y2K

Good information about Y2K is often just a mouse click away. To learn more about the "bug," how it relates to the Navy and how it may affect you or your personal computer, just jump on the Net.

There are many Y2K sites that are easily accessible on the Internet. Start by looking at Navy-sponsored web sites that specifically address Y2K. There are two excellent sites which can be found at **<http://www.doncio.navy.mil/y2k/year2000.htm> and <http://www.cnoy2k.navy.mil/ny2k/ny2k.htm>**. Both of these sites have specific information about the Navy's Y2K actions as well as links to other major Navy sites such as BUMED, CINCLANTFLT, CINCPACFLT, CINUSNAVEUR, NAVFAC, NAVSUP, NAVSEA, NCTS, SPAWAR and USMC.

The World Wide Web also has information relating to Y2K. To learn what the web has to offer, it's a good idea to explore different web sites and search there for information about your personal computer (PC). An easy way to start your exploration is by looking at sites that link to specific Y2K information. Here are two ideas: "Y2K Links" at **<http://www.y2klinks.com>** contains news headlines, links to other sites and information about free ware and share ware; another helpful site is "Y2K Central" at **<http://home.earthlink.net/~ddrasin/y2kcentral.html>**, which also has numerous links to other sites.
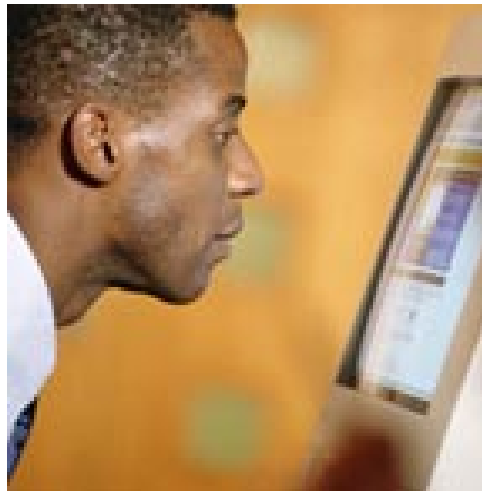
If you have access to search engines, you can tailor your search. For example, if you have a question specifically on Y2K Windows problems you could type the following in the search box, "how to fix windows Y2K problems." One of the links such a search might yield is a site sponsored by Windows, **<http://www3.zdnet.com/zdhelp/win_help/win_help.html>**.

There, one will find a specific section on Y2K fixes to the Windows program.

Although the Navy does not specifically endorse nor independently test any of these sites or solutions, as a consumer you can easily learn about many Y2K resources simply by surfing on the Internet. So, fire up your PC and get moving!

Red Cross Y2K preparation checklist

While most officials predict little or no impact on American society due to the Year 2000 "bug," there may be some areas where inconveniences are experienced. More than likely, these problems will be on par with those encountered during heavy storms. To that end, the American Red Cross has published a Y2K Preparation Checklist.

◯ Check with manufacturers of any essential computer-controlled electronic equipment in your home to see if that equipment may be affected. This includes fire and security alarm systems, programmable thermostats, appliances, consumer electronics, garage door openers, electronic locks and any other electronic equipment in which an "embedded chip" may control its operation.

◯ Stock supplies to last several days to a week for yourself and those who live with you. Having nonperishable foods, stored water and an ample supply of prescription and nonprescription medications on hand is advisible.

◯ As you would in preparation for a storm of any kind, have some extra cash on hand in case electronic transactions involving ATM cards, credit cards and the like cannot be processed. Plan to keep cash in a safe place, and withdraw money from your bank in small amounts.

◯ Keep your automobile gas tank above half full.

◯ In case the power fails, plan to use alternative cooking devices. Don't use open flames or charcoal grills indoors.

◯ Have extra blankets, coats, hats and gloves to keep warm. Do not plan to use gas-fueled appliances, like an oven, as an alternative heating source. The same goes for wood-burning or liquid-fueled heating devices that are not designed to be used in a residential structure. Camp stoves and heaters should only be used out of doors in a well-ventilated area. If you do purchase an alternative heating device, make sure it is approved for use indoors and is listed with the Underwriters Laboratories (UL).

◯ Have plenty of flashlights and extra batteries on hand. Don't use candles for emergency lighting.

◯ If you have smoke alarms that are hard-wired into your home's electrical system (most newer ones are), check to see if they have battery back-ups. Every fall, replace all batteries in all smoke alarms.

◯ Be prepared to relocate to a shelter for warmth and protection during a prolonged power outage, or if for any other reason local officials request or require that you leave your home. Listen to a battery-operated radio or television for information about where shelters will be available.

◯ If you plan to use a portable generator, connect what you want to power directly to the generator; do not connect the generator to your home's electrical system. Also, be sure to keep a generator in a well-ventilated area, either outside or in a garage, keeping the door open. Don't put a generator in your basement or anywhere inside your home.

◯ Check with the emergency service providers in your community to see if there is more information available about how your community is preparing for any potential problems. Be an advocate and support efforts by your local police, fire and emergency management officials to ensure that their systems will be able to operate at all times.

The American Red Cross helps people prevent, prepare for and respond to emergencies. They're in your neighborhood every day, providing disaster preparedness information and teaching classes in first aid and other lifesaving skills, to help keep families like yours safer. For more information, please contact your local American Red Cross or visit their website at **<http://www.redcross.org>.**

Protect yourself from Y2K scams

As the millennium draws near and people begin to fret about the Year 2000 "bug," some aggressive scam artists and fear mongers have been preying on those fears to cheat and steal. But, with a little common sense and attention to detail, consumers can defend themselves.

Most Y2K-related criminal scams tend to fall into three broad categories:

FINANCIAL: This category includes schemes such as one in which criminals, pretending to represent a victim's bank, call and offer a "Y2K compliant" magnetic strip for the victim's credit card. The victim is then induced to give his/her credit card number and expiration date, after which the information is used for fraudulent purposes. Another similar hoax also involves a criminal pretending to be a victim's bank, this time claiming the victim needs to move his/her money into a special, "Y2K-protected bond fund," for which the victim must provide bank account information.

COMPUTERS: This scam features bogus software allegedly able to fix Y2K-related problems, especially "chips," that purport to make computers or computerized appliances Y2K compliant. Another scheme involves "contractors" who promise to make business systems such as data bases and accounting systems Y2K compliant, then disappear with their advance fees.

SURVIVAL: More and more Americans believe that the millennium will create a disruption in daily life, including public utilities and food supplies. This group is preyed upon by purveyors of bogus "survival supplies," such as "purified survival water supplies," dried/preserved food and other survival equipment at grossly inflated prices.

Y2K and its purported consequences are merely the bait in all these scams and reflect criminals taking advantage of currently popular subjects to "hook" their victims. They are assisted by the extensive media coverage given the subject and the disagreements among experts about exactly what the impact of the millennium on daily life will be. The fact that most of the general public has a limited understanding of computers in general and Y2K in particular also assists criminals and makes those with the least understanding the most vulnerable.

So, what can you do to defend yourself? Well, here's some good advice:

- DON'T PANIC. Most Y2K-related problems are self-fulfilling prophecies: They will be problems only if enough people believe in them.

- To protect computer and other electronic equipment and ensure that it is Y2K compliant, check with the manufacturer. In particular, check on the compliance of any essential computer-controlled home equipment, such as fire and security alarms, programmable thermostats, electronic locks and any other items with embedded chip technology.

- NEVER give any kind of personal or financial information over the phone unless you initiated the call.

- If ANYONE claims to be calling from your bank, credit card company, etc., get the number and call them back. If they won't give you the number, hang up and call your bank. Then call the local police and/or Better Business Bureau and give them as much information as you can.

- Buy Y2K fixes only from reliable companies. If the price sounds too good to be true, it is.

- Save bank and financial statements and keep careful records. Check statements against your records. Consider obtaining a printed history of your loan payments, credit card payments, etc. If you conduct banking or financial transactions via your home computer, check with the manufacturers of your hardware and software to ensure you won't have any problems.

- Save any correspondence you receive from your bank, other financial institutions or utilities about Y2K problems and fixes.

- Try to keep your deposit accounts within federally insured limits.

- Complete financial transactions several days in advance of Friday, Dec. 31, 1999.

- Get a copy of your credit report before the end of the year. A few months into the new year, get another copy and compare the two to ensure there are no problems.

- Ask for a report on Y2K compliance and anticipated problems from any business in which you have a financial interest. This includes banks, financial institutions, stockbrokers, mutual and pension funds, any company in which you own stock, and any other in which you have a monetary interest.

Utilities testing eases Y2K impact on Sailors

The Navy is well on its way to ensuring that Sailors will not only be able to continue to fulfill their mission at sea but also ashore when the Year 2000 rolls around.

Engineering Field Divisions were tasked by Naval Facilities Headquarters to centrally assess utilities purchased from 535 utility companies worldwide. For all Navy and Marine Corps installations this was accomplished by writing, telephoning and following up aggressively with all companies to determine their state of Y2K preparedness and compliancy.

Earlier this year, Naval Facilities Engineering Command sponsored two pilot test sites in support of the Navy's ongoing Y2K efforts ashore. An East Coast test was conducted at Indian Head Division Naval Surface Warfare Center, Indian Head, Md., in coordination with Commander Naval Sea Systems Command and a West Coast test took place at Naval Construction Battalion Center, Port Hueneme, Calif., and Naval Air Station Point Mugu, Calif., in coordination with Commander-in-Chief U.S. Pacific Fleet.

Both tests were successful and will serve as a benchmark for testing at other installations. Examples of the types of equipment tested are electrical power, air conditioning, utilities, security, fire protection and traffic control systems. The final step of testing at all naval bases is scheduled to be completed by July 1, 1999.

Some bases will partner with utility companies to learn their states of readiness, including test plans and results, company contingency plans as they relate to Navy Department clients, etc. Meeting in person has proven to be best way to learn utility company readiness. This action to ensure utility company compliance will greatly benefit all Sailors and their families living in base housing.
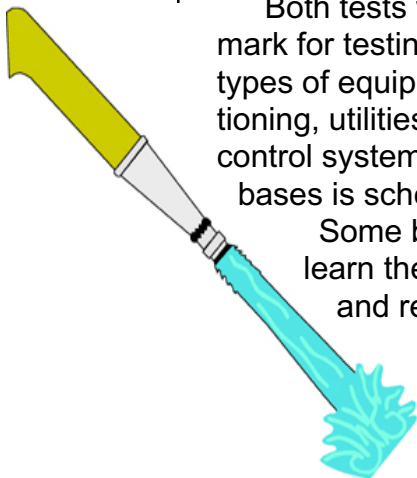
Y2K and You: a look at utilities

Q. Will there be safe drinking water at the tap Jan. 1, 2000, and each day thereafter?

A. The answer is yes, in the United States. Water purification systems receive high priority as utilities work toward compliance. A water utility's Y2K-compliance program must be designed to ensure safe drinking water is provided to customers. This important consideration plays heavily into the decision-making process as utilities prioritize systems for Y2K remediation.

Q. Will there be gasoline shortages because of Y2K?

A. An industry survey by the American Petroleum Institute indicates that oil companies should be well-prepared to continue refinery operations after Jan. 1, 2000. Seventy-six percent of companies surveyed reported they will have their embedded systems Y2K ready by June 1999. Seventy-three percent reported they will have contingency plans in place by June 1999. Contingency plans address things like identifying alternate electrical power sources and transportation vendors ahead of time. Year-end gasoline lines and shortages at the pump could result from large numbers of people all attempting to fill up their vehicles just before the new millennium arrives. Many oil companies intend to increase reserves to address this possibility. Most major oil companies have posted Year 2000 readiness disclosures to their websites.

Q. Some reports predict widespread power outages at the beginning of the Year 2000. Is this true?

A. These predictions are not based on facts or rational analysis of information from the industry. Sporadic spot outages in some areas is a far more likely scenario. Prepare for this possibility as you would for an outage caused by a winter storm. Have a flashlight with fresh batteries available and plenty of warm clothing if you live in a cold area. Most experts predict only short-term power outages.

Q. Will there be Y2K-related problems with natural gas supply?

A. An industry survey of municipal natural gas distributors shows 55 percent of those surveyed report they have no electronic systems whose failure would affect their distribution operations. Of the 45 percent who report potential Y2K impacts, all but 6 percent expect to be Y2K compliant by June 1999.

Through rain, sleet, snow and Y2K

In testimony before a joint House subcommittee hearing back in March, U.S. Postal Service (USPS) Chief Technology Officer Norman E. Lorentz said the USPS was successfully tackling the challenge posed by the Y2K Millenium Bug.

"This is one of the most important public policy issues we are facing this year," Lorentz said. "Our entire effort is being supported by the level of financial resources necessary to address this once-in-a-lifetime issue."

More than 400 postal employees and 1,300 contract technical support people are implementing and managing many of the technical elements of the Postal Service's Year 2000 program. The USPS has identified 152 systems that are critical to its core mission of delivering the mail. By the end of January, 127 of those systems had been fully checked and corrected.

The USPS planned to have fixes implemented on all but three systems by June of this year. The remaining three will be checked and updated by the end of September.

Efforts included checking more than 100 million lines of computer code.

USPS is also developing contingency plans should systems outside their control fail. Examples would be utilities that power mail-processing equipment, and transportation networks that carry much of the country's mail every day.

Older postage meters that print two-digit years are still acceptable to the USPS, but many of these are being replaced by newer ones that can be electronically reset and provide an imprint of a four-character year. USPS is working with meter manufacturers on an electronic resetting process. Concerned customers should contact the manufacturer for specific questions about their particular meters.

There has been no determination yet on what effect, if any, the Year 2000 effort will have on future changes in postage rates.

Don't let the bug bite your wallet

Many Sailors and their familes are worried about what effect the Y2K "bug" will have on their personal finances. The best advice, from officials throughout the financial community, is not to do anything rash with your money. Most banks are in good shape, since things like loan calculations and the like have required Year 2000 compliancy for years. So keep your money in the bank and don't cash in your investments. Beware of the scam artists who prey on fears. Their interest is in getting your money, not your well-being. If an offer sounds like it's designed to scare you into doing something rash or it seems too good to be true, it probably is.

If you've got an account at Navy Federal Credit Union (NFCU), you're in pretty good hands. Officials at NFCU say they've been working on the Y2K problem since 1991 and feel sure that there will be no disruption come Jan. 1, 2000. "We are testing our systems now," said Danielle Mabry, a Savings Telephone Center Unit Supervisor, "and the tests are going great. We intend to be complete by July of this year." According to their website, Navy Federal has actually been somewhat of an industry leader with regard to Y2K, working with and advising credit union trade associations and their regulator to assist other credit unions with Year 2000 issues. You can see for yourself at Navy Federal's website at **<http://www.navyfcu.org>**.

As with any sound financial plan, you should have good paper records of your accounts and bank statements. Having these allows you to quickly resolve any administrative errors that might occur at any time, not just in the event of a Y2K-caused administrative error. And, like you would for an impending power outage or storm, you might want to take out enough cash to get through a week or so – just in case your ATM has a problem.

If you have specific questions concerning your investments and accounts, contact your financial institutions directly and ask them about their Y2K compliancy.

Military, civilian and vendor pay won't be affected by Y2K

The Department of Defense (DOD) is confident that payments to its military members, civilian employees, military retirees and annuitants, and their affected allotments as well as payments to vendors and contractors will continue uninterrupted in January 2000.
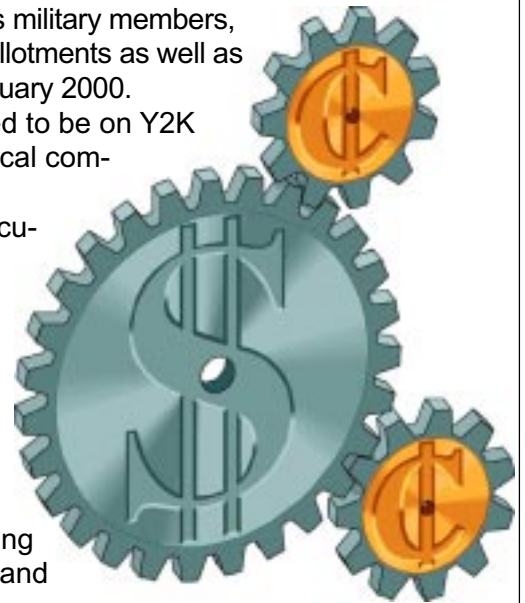
The DOD payment systems are Y2K compliant and were targeted to be on Y2K compliant platforms by the end of May 1999. All personnel and medical computer systems are also Y2K-compliant.

"It's more complicated than just, 'Will our computers properly calculate pay?'" said Deputy Defense Secretary John J. Hamre in an interview earlier this year. "We have to get electrons over to the Treasury Department. The Treasury Department has to pass on those electrons to the banks. The banks have to spread it out all over. We have something like 800 banks we do business with on a day-to-day basis."

Several options have been identified for ensuring scheduled payments are made without disruption in the event of a Y2K failure. Contingency plans include pre-positioning of payday tapes, processing backup files, identifying compatible hardware/software backup sites and providing auxiliary power in case of an electrical failure.

Since the majority of DOD payments are made by electronic funds transfer, systems will be tested with the Federal Reserve System and several financial institutions in the June to July 1999 time period.

In keeping with tradition, DOD is committed to doing everything within its power to ensure payrolls are made on time and that Y2K does not adversely affect its ability to make payments.

Y2K Preparation Checklist for Outside Services

Category	Function	Personal Preparation
Finances	Bank Accounts/ Credit Cards Investments Safe Deposit Boxes Bills Credit Report	☐ Ask bank about Y2K status, direct deposit, ATM, automatic banking functions ☐ Have a little cash on hand for necessary purchases...balance the need for cash with the requirement to safeguard it...ATM's may not work ☐ Consider impact on investments if communications systems are out ☐ Retain manual records and compare with first year 2000 statement Credit card statements, bill receipts, loan information/ status, bank statements, investment status ☐ If records are needed from storage remove before 12/31 ☐ Pay bills ahead of time/keep manual records – automatic payment systems may fail ☐ Get paper copy of credit report prior to 12/31 ☐ Get credit report after January 2000 and crosscheck with first one.
Insurance Policies	All policies/ coverages	☐ Check with agent for Y2K coverages ☐ Keep records of Y2K damages ☐ Ensure current policies on hand ☐ Copy/carry card.

Legal	Important documents	☐ Have paper copy on hand but stored safely:
		    wills, bills, deeds, school records,
		    medical records, birth certificates.

Employment	Payroll check Health benefits Pension, investment and savings plans	☐ Keep manual records Pay receipts/ deposits, Timecard, Benefits statement, make copy of health plan coverage/card ☐ Ask employer about Y2K pay policies ☐ Ask employer about Y2K readiness – consider loss of second income ☐ Check Y2K status of child care provider.
Local Government	Emergency Services Auto Registration / License Renewal Benefits Programs	☐ Know local emergency services number ☐ Register with local emergency services if vital medical services are needed during power failure ☐ Conduct permit business before 12/31 ☐ Expect delays in benefit registration – register before 12/15 or after 1/15 ☐ Keep copy of all forms.
Federal Government	Social Security Veteran's Benefits Postal Service	☐ Request Personal Earnings and Benefit Estimate from Social Security Administration (www.ssa.gov or use PEBES form (SSA 7004)) ☐ Expect delays in benefit registration ☐ Mail early...expect possible delays 1/1 to 1/15.
Transportation and Travel	Reservations, Ticketing Hotel Reservations Air Travel Automobile	☐ Anticipate delays, especially to air traffic ☐ Request and carry hard copy of reservation ☐ Fill gas tank before 12/31 ☐ Traffic – control systems may be out or malfunctioning (intersections/ RR crossings)...be extra vigilant.
Other Concerns		